

Lasting Legacies

Gifts to Medicine and the American People



An Event Honoring Donors to the
National Library of Medicine
and Its History of Medicine Division

September 11, 2001

The Honorees and their Gifts

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| Libby Anfinssen | Donor of the personal papers of Christian B. Anfinssen |
| Julius Axelrod, Ph.D. | Donor of his personal papers |
| Sheldon G. Cohen, M.D. | Donor of books, medals, and portrait busts |
| Donald S. Fredrickson, M.D. | Donor of his personal papers |
| Margaret K. O'Bryon | President and CEO of the Consumer Health Foundation, donor of the records of the Group Health Association of Washington, D.C. |
| William H. Helfand | Donor of posters, prints, illustrations, and medical ephemera |
| Joshua Lederberg, Ph.D. | Donor of his personal papers |
| Paul D. MacLean, M.D. | Donor of books and his personal papers |
| Marshall W. Nirenberg, Ph.D. | Donor of his personal papers |
| Barbara Rodbell | Donor of the personal papers of Martin Rodbell |
| Mary E. Schlesinger | Donor of books collected by Edward B. Schlesinger |
| Martine Jozan Work, M.D. | Donor of the personal papers and motion picture films of Telford H. Work |



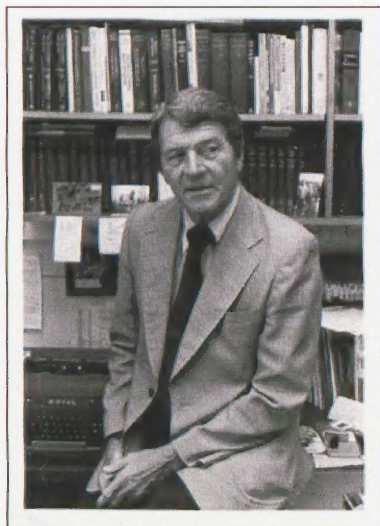
The Players

Presentations: Donald A. B. Lindberg, M.D., Director, National Library of Medicine

Clio, The Muse of History: Elizabeth Fee, Ph.D., Chief, History of Medicine Division, National Library of Medicine

Marie Sklodowska Curie, Nobel Laureate: Alexa T. McCray, Ph.D., Director, Lister Hill National Center for Biomedical Communications, National Library of Medicine

John Shaw Billings, M.D., Founder of the National Library of Medicine: Paul H. Theerman, Ph.D., Head, Non-Book Collections, History of Medicine Division, National Library of Medicine



Christian B. Anfinsen

A question that Christian B. Anfinsen might have asked himself: How can a very large molecule carry out extremely specific tasks, as enzymatic proteins do when they catalyze biochemical reactions? It would seem that the different possible shapes—and therefore functions—that a large, long, and complex protein molecule could assume would not allow this biological specificity. But Anfinsen showed that protein structure is really quite determined. Under physiological conditions, proteins naturally and spontaneously assume their biologically active shapes. He received the Nobel Prize in Chemistry in 1972.

Anfinsen's passion for research overflowed into humanitarian and political activism. He was Chair of the National Academy of Sciences' Committee for Human Rights, working as advocate for scientists imprisoned by repressive regimes. He was also intensely involved with issues of nuclear disarmament, environmental safety, and biotechnology standards.

Sailing was another love and people remember him on board his boat, the *Good Girl*.

Four years after his death in 1995, his widow Libby Anfinsen donated his papers to the National Library of Medicine.



Julius Axelrod

Julius Axelrod once wrote:

Successful scientists are generally recognized at a young age. They go to the best schools on scholarships, receive their postdoctoral training fellowships at prestigious laboratories, and publish early. None of this happened to me.

Here's what did happen. Born on the Lower East Side of Manhattan, the son of Polish immigrants, Axelrod attended City College of New York, the "Proletarian Harvard." He worked in the laboratory of the New York Health Department, married Sally Taub, and lost an eye in a laboratory explosion. He studied for his Ph.D. at night, and steadily worked his way into independent research.

Axelrod's groundbreaking work showed that mental states are the result of complex physiological processes. His fundamental discoveries on the functioning of neurotransmitters such as norepinephrine and dopamine help us understand how many drugs work. His insights led to the development of a new class of antidepressant medications such as Prozac, as well as more commonplace helps such as Tylenol, which he helped test and clear for clinical use.

Julius Axelrod received the Nobel Prize in Medicine in 1970. He was Chief of Pharmacology at the National Institute of Mental Health until 1984, where he continues as emeritus scientist. He donated his manuscripts and papers to the National Library of Medicine in 1998.



Sheldon G. Cohen

Sheldon G. Cohen has enjoyed a distinguished and multifaceted career as a scientist, clinician, academician, mentor of several scientific generations, and administrator at the National Institute of Allergy and Infectious Diseases. He is also a noted scholar of the history of asthma; he coedited *Excerpts from Classics in Allergy* and has recently completed the forthcoming *Asthma Among the Famous*. Sheldon Cohen was the inspiration behind and scientific advisor to the Library's "Breath of Life" exhibition on the history and current management of that disease.

Sheldon Cohen has donated many rare books to the Library in memory of his family and colleagues. The gift volumes cover topics such as plague, catarrh, and fevers. He has also presented a set of 25 medals, sculpted by Abram Belskie, depicting great figures in the history of medicine including William Harvey, Ambroise Paré, and Andreas Vesalius. Additional splendid gifts of bronze sculpted busts of Moses Maimonides, Edward Jenner, and Louis Pasteur are to be displayed in the HMD reading room.

Active as a visiting scholar in the History of Medicine Division, Sheldon Cohen reaches, through his many biographical studies, for larger social and moral insights that can illuminate the experience of contemporary patients and practitioners.



William H. Helfand

William H. Helfand has had a long and fruitful association with the National Library of Medicine. In 1967 he gave to the Prints and Photographs Collection the first of many gifts of images, including medical caricatures and engravings by Honoré Daumier, Thomas Rowlandson, and George Cruikshank. Over the years, he has continued to donate thousands of posters, postcards, calendars, pamphlets, and assorted ephemera to the collections.

Some collectors hoard their treasures, but Bill Helfand is very much part of the show here at NLM. He became a library consultant in 1987 and has been a very active contributor ever since. His personal collection has been the subject of an NLM exhibition, "Here Today, Here Tomorrow: Varieties of Medical Ephemera."

Bill Helfand's mission has been to gather contemporary public health illustrations, especially posters, from around the world. To this work he brings his wide experience in the pharmaceutical industry, as well as almost half a century's expertise in collecting. He has published five books including (with David L. Cowen) *Pharmacy: An Illustrated History*. He is now retired from his executive position with Merck and Co. after 33 years, some of them spent as head of the European division in Paris.

His gifts are unique works of art that have made the NLM a showcase of sociocultural medical images that, in his words, "balance artistic merit with social purpose."



Joshua Lederberg

In 1932, while a second-grader at a Manhattan Public School, Joshua Lederberg wrote an essay on "What I Would Like to Be," namely, "a scientist of mathematics like Einstein. I would study science and discover a few theories in science."

A few theories, indeed: Lederberg became a world-renowned scientist, although as a geneticist rather than a mathematician. He has been at the vanguard of many hot topics in science: bacterial genetics, the search for extraterrestrial life, computers and artificial intelligence, and the control of biological and chemical warfare. His discoveries in genetics disclosed many mysteries of inheritance and mutation, the evolution of diseases, the causes of drug resistance, and the possibilities of genetic engineering and gene therapy.

Joshua Lederberg received the Nobel Prize in 1958 for his work in genetic conjugation, that is, the sexual exchange of bacterial DNA; and genetic transduction, the transfer of genetic material between bacteria by means of viruses. He has been adviser to the government on topics ranging from mental retardation to biological arms control. He has also been a *Washington Post* commentator on health policy, science education, and environmental protection.

Joshua Lederberg gave his voluminous collection of personal papers to the National Library of Medicine in 1998. It formed the premier on-line collection in *Profiles in Science*.



Paul D. MacLean

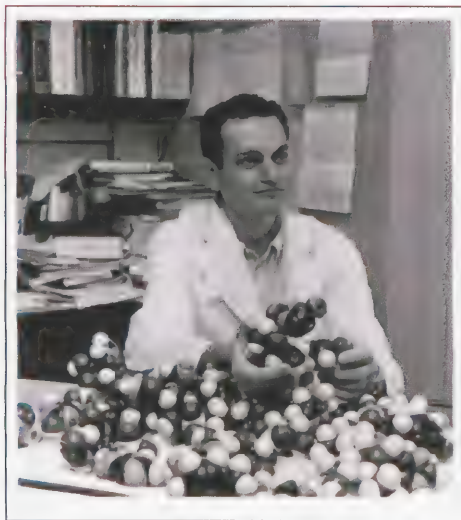
Paul D. MacLean developed a unique evolutionary model of the human brain. According to his theory, the brain has, over the eons, acquired three layers that he called the reptilian, the limbic, and the neocortical. The reptilian brain struggles for territory; the limbic for pleasure; the neocortical for enlightenment.

MacLean observed that

Language barriers among nations present great difficulties in arriving at solutions. But the greatest language barrier lies between man and his animal brains . . . The neural machinery simply isn't there for communication in verbal terms . . . If through education, we could only apply what the brain already knows, the year 2000 might see the beginning of a truly golden era.

MacLean's theories extended their influence to diverse fields from art, to poetry, to social science. Indeed, as his theories spread into the culture at large, early childhood educators used his research to argue in favor of effective learning environments.

Paul MacLean was director of the Laboratory of the Brain and Behavior at the National Institute of Mental Health. He deeded his collection to the NLM in 1998.

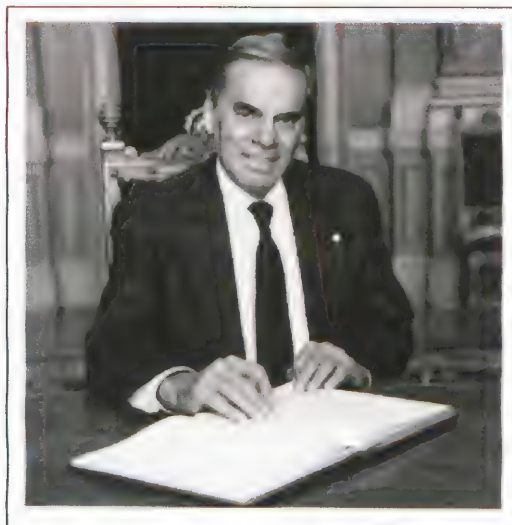


Marshall W. Nirenberg

Ever since James Watson and Francis Crick discovered the double helical structure of DNA, scientists knew that there must be a system of coding for amino acids, the building blocks of proteins. Marshall W. Nirenberg—while still a young researcher—was the one who cracked that code, beating out many more senior scientists on the same trail. Nirenberg and Heinrich Matthaei, a postdoc from Germany, were the ones who made the first breakthrough. Within five years, Nirenberg had worked out the genetic sequences for all twenty amino acids. He was awarded the Nobel Prize in 1968.

Even as he was cracking the genetic code, Nirenberg was opening up a new research program in neurobiology, which he continues today. He became Chief of Biochemical Genetics at the National Heart, Lung, and Blood Institute in 1962. He and his Brazilian wife, Perola Zaltzman, have traveled in Latin America and collect art and crafts from that region.

Nirenberg donated his papers and laboratory notebooks to the National Library of Medicine in 1999.



Martin Rodbell

Martin Rodbell was an American biochemist and molecular endocrinologist. He started his research career in Christian Anfinsen's laboratory, and over the course of 30 years, he worked out the mechanisms by which hormones and other stimulants produce biochemical changes inside the cell. His theory of signal transduction explains physiological phenomena as diverse as how we see and smell and how cholera disrupts the body in deadly ways.

Martin Rodbell inspired great dedication and affection from his colleagues. In his Nobel Lecture he wrote:

My father's [Baltimore] grocery store was a community center . . . I have come to realize how important this long-gone community and the intense human relationships have been to my development as a scientist. My scientific neighborhood encompasses a place where cultural and language difference have been melded seamlessly and with synergy to promote communication, to expand knowledge with a kinship of purpose, and to create new thought.

Rodbell was a Renaissance man who loved French existentialist literature. Upon accepting the 1994 Nobel Prize in Physiology or Medicine, he read an original poem before Carl Gustav, King of Sweden. For over 40 years he held research positions at several NIH institutes, ending his career as Scientific Director of the National Institute of Environmental Health Sciences.

Martin Rodbell died in December 1998, and Barbara Rodbell donated the Martin Rodbell Papers to the National Library of Medicine in April 1999.



Edward B. Schlesinger

As an investigator, clinician, leader, and teacher, Edward B. Schlesinger was known for his diagnostic and operating skills, and for his skill in communicating with patients and practitioners. He served as Army surgeon during World War II, then returned to his alma mater, the College of Physicians and Surgeons of Columbia University, where he ultimately became Chair of the Department of Neurological Surgery and President of the Neurological Society of America.

Although his main clinical interest was in diseases of the spine and spinal cord, he also wrote on a wide range of subjects in neurology and neurosurgery. Especially significant were the innovations he made to brain scanning and to the use of isotopes to localize brain tumors.

Edward Schlesinger was an avid collector, and when he died in 1997, Mary E. Schlesinger donated her husband's neurological collection to the Library. The collection includes works by Sigmund Freud and William James, many classic works in neurology, and numerous books on anatomy, midwifery, and physiognomy.

Edward Schlesinger is represented by his daughter, Prue Adler.



Telford H. Work

Over more than fifty years of research and writing, Telford H. Work made significant contributions to the understanding of viral diseases. He was unique in combining the roles of naturalist, epidemiologist, and filmmaker. Whatever he did and wherever he went, he brought along his motion picture camera.

It all started after medical school when he joined the Navy and went on a tanker around the world. His years spent in hot climates, where he became familiar with tropical diseases, steered him towards a career in international health and epidemiology. After postdoctoral study in London and at Johns Hopkins, he was appointed to the newly formed Rockefeller Foundation arbovirus research program, and assigned to Cairo. While in Egypt, Dr. Work recognized the role of wild birds in the ecology and transmission of West Nile virus.

Telford Work went on to isolate several unknown viruses and to study many different viral diseases in Fiji, India, Iran, Australia, and Argentina. Among other appointments, he served as Director of the Virus Research Center in India and Director of the Virology Section of Centers for Disease Control and Prevention (CDC).

Telford Work's films provide an unusually rich documentation of public health research around the world. Martine Jozan Work donated her late husband's motion pictures to the Historical Audiovisuals Collection in 2001, to complement his manuscript collection, which came to the Library in 1996.

